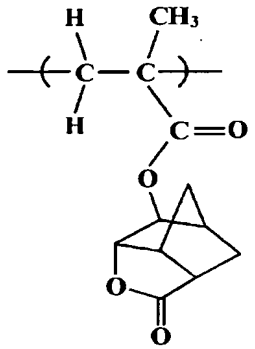
CLAIMS

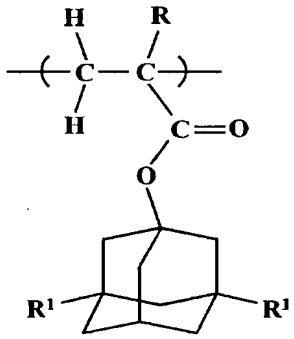
1. (Amended) An acrylic copolymer comprising:

a recurring unit of the following formula (1),



(1)

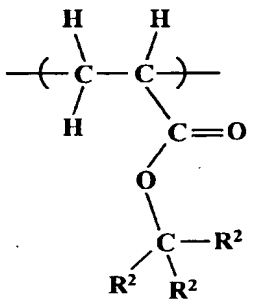
a recurring unit of the following formula (2),



(2)

wherein R represents a hydrogen atom or a methyl group; R^1 individually represents a hydrogen atom, hydroxyl group, or $-COOR^3$ group, wherein R^3 is a hydrogen atom, a linear or branched alkyl group having 1-4 carbon atoms or an alicyclic alkyl group having 3-20 carbon atoms, provided that at least one of R^1 groups is not a hydrogen atom, and

a recurring unit of the following formula (3),



(3)

wherein any two of R^2 groups form, in combination and together with the carbon atom to which the two R^2 groups bond, a divalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative thereof, with the remaining R^2 being a linear or branched alkyl group having 1-4 carbon atoms, a monovalent alicyclic hydrocarbon group having 4-20 carbon atoms, or a derivative thereof.

2. A radiation-sensitive resin composition comprising an acid- labile group-containing resin which is insoluble or scarcely soluble in alkali, but becomes alkali soluble by the action of an acid, and a photoacid generator, wherein the acid- labile group-containing resin is the acrylic copolymer according to claim 1.

3.The radiation-sensitive resin composition according to claim 2, wherein at least one R^1 group in the formula (2) is a hydroxyl group

4. The radiation-sensitive resin composition according to claim 2, wherein the group $-C(R^2)_3$ in the formula (3) is at least one group selected from the group consisting of a 1-methyl-1-cyclopentyl group, a 1-ethyl-1-cyclopenthyl group, a 1-methyl-1-cyclohexyl group, and a 1-ethyl-1-cyclohexyl group.

5. The radiation-sensitive resin composition according to claim 2, wherein the acid- labile group-containing resin comprises the recurring unit (1), recurring unit (2), and recurring unit (3) at a molar ratio (mol% of the total recurring units) of 20-70: 5-40: 20-50.

6. The radiation-sensitive resin composition according to claim 2, wherein the photoacid generator comprises at least one compound selected from the group consisting of a triphenylsulfonium salt compound, a 4-cyclohexylphenyldiphenylsulfonium salt compound, a 4-t-butylphenyldiphenylsulfonium salt compound, and a tri(4-t-butylphenyl)sulfonium salt compound.

7. The radiation-sensitive resin composition according to claim 2, wherein the amount of photoacid generator is 0.1-7 parts by weight for 100 parts by weight of the acrylic copolymer.

8. The radiation-sensitive resin composition according to claim 2, further comprising an acid diffusion controller, wherein the acid diffusion controller is a nitrogen-containing organic compound.

9. The radiation-sensitive resin composition according to claim 2, wherein after post exposure baking the size of contact hole patterns is reduced at an excellent precision by post development baking.

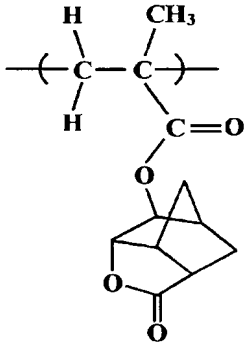
10. (Added) The radiation-sensitive resin composition according to claim 2, wherein any two of R^2 groups in the formula (3) of the acid- labile group-containing resin form, in combination and together with the carbon atom to which these R^2 groups bond, a divalent monocyclic alicyclic hydrocarbon group having 4-20 carbon atoms or a

derivative thereof, with the remaining R^2 group being a linear or branched alkyl group having 1-4 carbon atoms, a monovalent alicyclic hydrocarbon group having 4-20 carbon atoms, or a derivative thereof.

11. (Added) The radiation-sensitive resin composition according to claim 10, wherein the divalent monocyclic alicyclic hydrocarbon group having 4-20 carbon atoms is a cyclopentyl group or a cyclohexyl group.

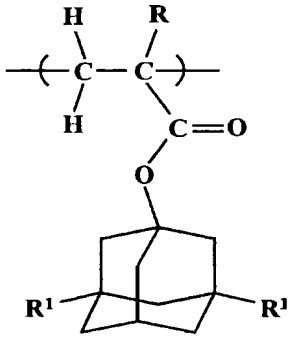
12. (Added) An acrylic copolymer consisting essentially of:

a recurring unit of the following formula (1),



(1)

a recurring unit of the following formula (2),

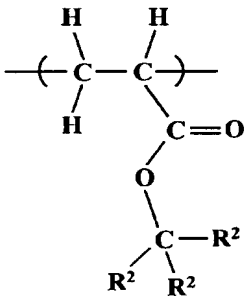


(2)

wherein R represents a hydrogen atom or a methyl group; R^1 individually represents a

hydrogen atom, hydroxyl group, or $-COOR^3$ group, wherein R^3 is a hydrogen atom, a linear or branched alkyl group having 1-4 carbon atoms, or an alicyclic alkyl group having 3-20 carbon atoms, provided that at least one of R^1 groups is not a hydrogen atom, and

a recurring unit of the following formula (3),



(3)

wherein any two of R^2 groups form, in combination and together with the carbon atom to which the two R^2 groups bond, a divalent alicyclic hydrocarbon group having 4-20 carbon atoms or a derivative thereof, with the remaining R^2 being a linear or branched alkyl group having 1-4 carbon atoms, a monovalent alicyclic hydrocarbon group having 4-20 carbon atoms, or a derivative thereof.